

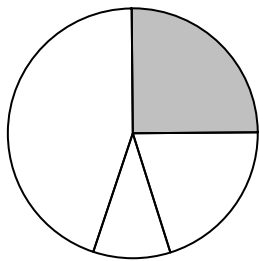


- 1 A large square has a perimeter of 54 inches. A small square has dimensions that are $\frac{1}{8}$ the dimensions of the large square. What is the perimeter of the small square?

A 1.68 inches
B 6.75 inches
C 13.5 inches
D 27 inches

- 2 Melissa drew a circle graph with a diameter of 40 centimeters to represent the results of her social studies project. She will color the shaded region blue.

Melissa's Circle Graph



What is the approximate area of the shaded region of Melissa's circle graph?

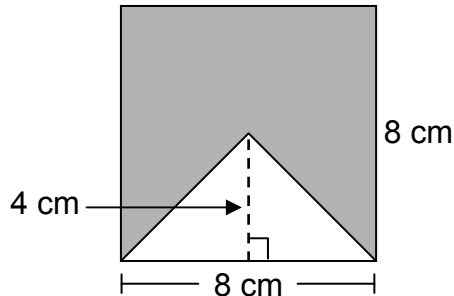
A 5,024 cm²
B 1,256 cm²
C 628 cm²
D 314 cm²

- 3 The dimensions of a large regular hexagon are 5 times the dimensions of a small regular hexagon. If you were given the area of the small regular hexagon, how could you find the area of the large regular hexagon?

A Multiply the area of the small regular hexagon by 5.
B Multiply the area of the small regular hexagon by 10.
C Multiply the area of the small regular hexagon by 20.
D Multiply the area of the small regular hexagon by 25.



- 4 Which of the following procedures could be used to find the area of the shaded region in the figure below?



- A Find the area of the square then subtract the area of the triangle.
- B Find the area of the square then add the area of the triangle.
- C Find the perimeter of the square then add the perimeter of the triangle.
- D Find the perimeter of the square then subtract the perimeter of the triangle.
- 5 A truck tire has a diameter of 30 inches. A car tire has a diameter of 26 inches. Approximately how much farther will the truck tire travel in 1 rotation than the car tire?
- A 94.2 inches
- B 81.64 inches
- C 12.56 inches
- D 4.0 inches

- 6 An isosceles triangle has sides that each measure 10 inches and a base that measures 12 inches. If the sides of the triangle are doubled, how would this affect the perimeter of the new triangle?

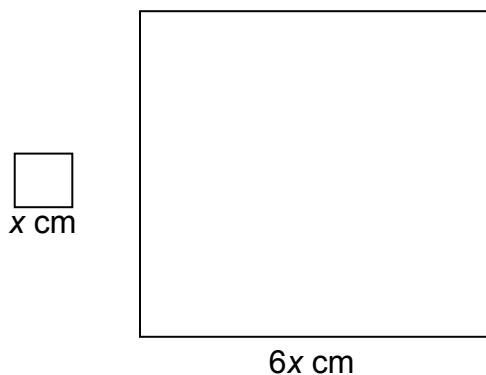
- A The perimeter of the new triangle will be the same as the perimeter of the original triangle.
- B The perimeter of the new triangle will be double the perimeter of the original triangle.
- C The perimeter of the new triangle will be four times the perimeter of the original triangle.
- D The perimeter of the new triangle will be eight times the perimeter of the original triangle.

- 7 A rectangular parking lot measures 150 feet by 200 ft. If the area of the parking lot is increased by 20%, what will be the area of the new parking lot?

- A 1,200 square feet
- B 6,000 square feet
- C 36,000 square feet
- D 37,400 square feet



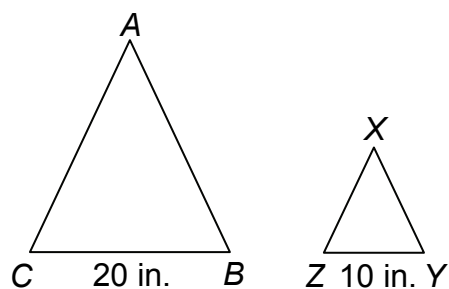
- 8 The dimensions of 2 squares are shown below.



The area of the small square is 9 square centimeters. What is the area of the large square?

- A 324 cm^2
- B 216 cm^2
- C 108 cm^2
- D 54 cm^2

- 9 Triangle ABC is similar to triangle XYZ .

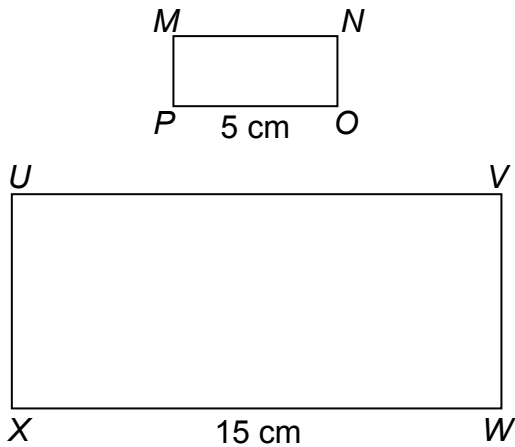


The area of triangle ABC is 300 square inches. What is the area of triangle XYZ ?

- A 15 square inches
- B 75 square inches
- C 150 square inches
- D 900 square inches



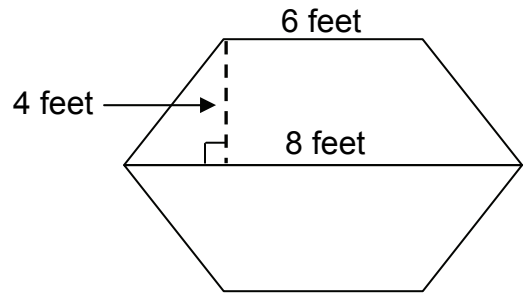
- 10 Rectangle $MNOP$ is similar to rectangle $UVWX$.



The perimeter of rectangle $MNOP$ is 18 centimeters. What is the perimeter of rectangle $UVWX$?

- A 27 cm
- B 54 cm
- C 162 cm
- D 180 cm

- 11 Katy is making a wooden table that is shaped like a hexagon. She made two congruent trapezoids and put them together to form the pattern for the table top shown below.



What is the area of the table top?

- A 112 square feet
- B 64 square feet
- C 56 square feet
- D 28 square feet